

IMPLEMENTATION OVERVIEW – DETECTORS AND CONTROLLERS

Before one can begin programming a controller or detector to accept counts, one must first make a few critical decisions about desired counting data:

- ♦ *Determine which movements you will need counts for*
- ♦ *Determine the time periods during the day or week that you want counts logged*
- ♦ *Determine the counting interval frequency desired*

There are three reasons to ask each of these questions. First, cabinets have a limited number of inputs to receive counts, particularly NEMA TS-1 cabinets without a D-panel. If a controller in a TS-1 cabinet is using five NEMA phases, that leaves only three remaining phase inputs to accept counts (unless a D-panel is installed), so critical choices as to count movements, or more precisely count *loops*, must be made. For a TS-2 cabinet, there are more inputs available, but there is still a finite amount of empty card slots (unless an additional detector rack is installed). Of course, more loops than the number of remaining phase inputs or empty slots can be collected, just not simultaneously.

Second, it is critical to collect at least the minimum data that you will need, but no more than is necessary for all users, to avoid having to sift through extraneous information. There is no sense collecting data every 5 minutes, 24 hours a day, for every movement, if there is no way that any user would need this information. Typical time periods might include: peak hours, eight hour counts, 24-hour counts, etc. Typical summation (count interval, count bin) frequencies are 15 minutes and 60 minutes. It is important to see what information would be useful to both internal users within the Department and external users, and collect that.

Third, controllers have limited memory to store counts, and traffic services or traffic engineering personnel may be delayed in returning to the controllers to download count data.